

IN THE CLAIMS

1. (Currently Amended) A data processing apparatus comprising:

- a) input means for inputting data;
- b) encoding means for compression-encoding the data;
- c) first packetizing means for receiving from a packet size control

means data length information for controlling a length of a first data train and for
packetizing the data encoded by said encoding means into the first data train in accordance
with the received data length information; and first data train on a basis of a first data
length; and

d) second packetizing means for packetizing the first data train
generated by said first packetizing means into a second data train, ;

~~wherein the second data train has a corresponding predetermined fixed~~
~~payload length, and~~

~~wherein the first data length is determined in accordance with at least the~~
~~predetermined fixed payload length corresponding to the second data train.~~

2. (Currently Amended) A data processing apparatus according to
claim 1, wherein said encoding means compression-encodes the data on a basis of a
predetermined data length, and said control means controls the first data train length in
accordance with the predetermined encoding data length and the ~~second~~ data length
information.

3. (Currently Amended) A data processing apparatus according to claim 2, wherein said control means controls the first data length to have a value being equal to N (N: integer) times the predetermined encoding data length and near to a value not exceeding L (L: integer) times the ~~second~~ data length information.

4. (Previously Presented) A data processing apparatus according to claim 1, wherein the data is audio data.

5. (Previously Presented) A data processing apparatus according to claim 2, further comprising:

reference time information generation means for generating reference time information; and

time management information generation means for generating time management information representative of an input time of the data to said input means, in accordance with the reference time information,

wherein said first packetizing means adds the time management information to the first data train based upon a first period, and said second packetizing means adds the reference time information to the second data train based upon a second period.

6. (Previously Presented) A data processing apparatus according to claim 5, wherein said control means controls the first data length in accordance with the time management information.

7. (Previously Presented) A data processing apparatus according to claim 6, wherein the reference time information, is PCR of MPEG specifications and the time management information is PTS of MPEG standard.

8. (Currently Amended) A data processing apparatus according to claim 6, wherein said control means controls the first data length to maximize the predetermined encoding data length satisfying the first period and have a value being equal to a minimum common multiple of the predetermined encoding data length and the ~~second~~ data length information or being equal to N (N: integer) times the predetermined encoding data length and near to a value not exceeding L (L: integer) times the ~~second~~ data length information.

9. (Previously Presented) A data processing apparatus according to claim 1, wherein said encoding means can change a compression factor.

10. (Previously Presented) A data processing apparatus according to claim 1, wherein said second packetizing means adds, if necessary, redundant data to form the second data train.

11. (Currently Amended) A data processing apparatus according to claim 1, further comprising:

image data input means for inputting image data;

image data encoding means for compression-encoding the image data; and

third packetizing means for packetizing the image data encoded by said encoding means on a basis of a third data length,

wherein said second packetizing means packetizes the third data train generated by said third packetizing means on a basis of the ~~second~~ data length information.

12. (Previously Presented) A data processing apparatus according to claim 11, wherein said image data encoding means compression-encodes the image data in conformity with MPEG.

13. (Previously Presented) A data processing apparatus according to claim 11, further comprising a video camera for outputting the data and the image data.

14. (Previously Presented) A data processing apparatus according to claim 11, further comprising transmission means for transmitting the second data train.

15. (Previously Presented) A data processing apparatus according to claim 14, further comprising decoding means for decoding the second data train transmitted by said transmission means.

16. (Previously Presented) A data processing apparatus according to claim 15, further comprising display means for displaying the image data decoded by said decoding means.

17. (Previously Presented) A decoding apparatus for decoding the second data train transmitted by the data processing apparatus recited in claim 14.

18. (Currently Amended) A data processing method comprising the steps of:

inputting data;

compression-encoding the data;

receiving packet size control information comprising data length information for controlling a length of a first data train;

packetizing the encoded data into the a first data train on a basis of ~~a first~~
the received data length information; and

packetizing the generated first data train into a second data train. [[,]]

~~wherein the second data train has a corresponding predetermined fixed~~
~~payload length, and~~

~~wherein the first data length is determined in accordance with at least the~~
~~predetermined fixed payload length corresponding to the second data train.~~

19. (Currently Amended) A computer readable storage medium storing an image processing program, the program comprising:

an input step of inputting data;

an encoding step of compression-encoding the data;

a receiving step of receiving packet size control information comprising data length information for controlling a length of a first data train;

a first packetizing step of packetizing the data encoded in said encoding step into the a first data train on a basis of a ~~first~~ the received data length information; and

a second packetizing step of packetizing the first data train generated in said first packetizing step into a second data train. [[,]]

~~wherein the second data train has a corresponding predetermined fixed payload length, and~~

~~wherein the first data length is determined in accordance with at least the predetermined fixed payload length corresponding to the second data train.~~

20. (Previously Presented) A decoding apparatus for decoding the second data train obtained by the data processing method recited in claim 18.

21. (New) A data processing apparatus according to claim 1, wherein the first data train comprises at least one packetized elementary stream (PES) packet in accordance with a Moving Picture Coding Experts Group (MPEG) standard, and the second data comprises at least one transport stream packet in accordance with the MPEG standard.

22. (New) A data processing method according to claim 18, wherein the first data train comprises at least one packetized elementary stream (PES) packet in accordance with a Moving Picture Coding Experts Group (MPEG) standard, and the second data comprises at least one transport stream packet in accordance with the MPEG standard.

23. (New) A data decoding apparatus comprising:

a decoding means for decoding a second data train, wherein the second data train is generated by an apparatus comprising:

input means for inputting data;

encoding means for compression-encoding the data;

first packetizing means for receiving from a packet size control means data length information for controlling a length of a first data train and for packetizing the data encoded by said encoding means into the first data train; and

second packetizing means for packetizing the first data train generated by said first packetizing means into a second data train.

24. (New) A data decoding method, comprising:

decoding second data train, wherein the second data train is generated by a method comprising:

inputting data;

compression-encoding the data;

receiving packet size control information comprising data length information for controlling a length of a first data train;

packetizing the encoded data into the first data train on a basis of the received data length information; and

packetizing the generated first data train into a second data train.

25. (New) A data processing apparatus comprising:

- a) an input unit, arranged to input data;
- b) an encoding unit, arranged to compression-encode the data;
- c) a first packetizing unit, arranged to receive from a packet size

control unit data length information for controlling a length of a first data train and to packetize the data encoded by said encoding unit into the first data train in accordance with the received data length information; and

d) a second packetizing unit, arranged to packetize the first data train generated by said first packetizing unit into a second data train.

26. (New) A data decoding apparatus comprising:

a decoding unit, arranged to decode a second data train, wherein the second data train is generated by an apparatus comprising:

an inputting unit, arranged to input data;

an encoding unit, arranged to compression-encode the data;

a first packetizing unit, arranged to receive from a packet size control unit data length information for controlling a length of a first data train and to packetize the data encoded by said encoding unit into the first data train; and

a second packetizing unit, arranged to packetize the first data train generated by said first packetizing unit into a second data train.